

REMARKS

In the Non-Final Office Action mailed May 14, 2008, claims 1-47 are pending in this application. Claims 35, 40, and 45 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 1-34, 36-39, 41-44, and 46-47 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,430,729 ("Rahnema"). Applicant traverses the rejections, amends the specification, and amends claims 1, 7, 8, 19, 23, 30, 35-37, and 40 to more particularly define the claimed subject matter. The amendments are fully supported by the specification as originally filed and do not add new matter. Therefore, Applicant requests reconsideration in light of the following remarks:

Claims 35, 40, and 45 are Directed to Statutory Subject Matter

The Action contends that claims 35, 40, and 45, each of which recites a "computer-readable medium," are directed to non-statutory matter because the specification defines a computer-readable medium to include a carrier wave. (Office Action, p. 2.) Without concurring in the Action, Applicant has amended the specification to exclude carrier waves from the definition of a computer-readable medium. Applicant believes that this amendment obviates the rejection of claims 35, 40, and 45 under 35 U.S.C. § 101 and requests reconsideration and withdrawal of the same.

Claims 1-47 Patently Distinguish over Rahnema

According to the MPEP, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" (MPEP 2131). Rahnema fails to teach each and every element of the independent claims.

Amended Independent Claim 1 Patently Distinguishes Over Rahnema

Amended independent claim 1 recites a control station in a network that generates batches of forwarding tables. Each batch includes a primary forwarding table and a plurality of backup forwarding tables. Each node in the network receives a batch of the forwarding tables and installs the primary forwarding table. In response to a node detecting a quality change in an outbound or inbound link associated with the node, the node generates a message instructing other nodes in the

network to switch from a current forwarding table to one of the backup forwarding tables associated with the detected link. Rahnema fails to describe this subject matter.

In particular, Rahnema fails to describe a node in a network that in response to detecting a change in an associated outbound or an inbound link, generates a message instructing other nodes in the network to switch from a current primary forwarding table to one of a plurality of backup forwarding tables received at the respective node. The Action asserts this subject matter is described in Rahnema at column 20, lines 33-38. Applicant disagrees. The cited section is a claim in Rahnema which states:

A method as claimed in claim 11 further comprising the steps of repeating the determining [of available links], the finding [of alternative minimum hop routes], the temporarily updating [of link usage probability for the alternative minimum hop routes], the calculating and the selecting steps for each of said predetermined time periods, and generating a list of first choice minimum hop routes for each of said constellation configurations.

(added text extracted from parent claims)

This passage describes generating a list of minimum hop routes for routing a package from a source node to a destination node for each of a plurality of constellations. This passage is completely silent as to whether a node notifies other nodes of detected link failures, as recited in the claim. Instead, elsewhere in the reference, Rahnema states that a node's response to detecting failing links is merely to discard the package (see Rahnema, FIGS. 9 and 10). Thus instead of notifying other nodes of failing links, Rahnema suggests a node merely give up. A node that generates a message instructing other nodes in the network to switch from a current forwarding table to one of the backup forwarding tables received at the respective node, however, is the explicit subject matter of amended claim 1.

In addition, Rahnema also fails to describe a batch of forwarding tables that includes a primary forwarding table and a plurality of backup forwarding tables, as recited in independent claim 1. The Action asserts that the exit link choices in FIG. 5 of Rahnema constitute the recited subject matter. (Office Action, page 3.) Applicant disagrees. FIG. 5 of Rahnema shows a routing table which includes, for each destination node, first choice, second choice, and third choice link

designators as columns in the table. That is, Rahnema describes a single routing table with backup routing information for certain links. Rahnema does not describe a distinct primary forwarding table and a plurality of backup forwarding tables as is specifically recited in original and amended independent claim 1. Thus, Rahnema does not teach each and every limitation of amended independent claim 1, as is required for a rejection under § 102(b).

Applicant therefore requests reconsideration and withdrawal of the § 102 rejection of amended independent claim 1. Claims 2-7 depend from claim 1 and add further limitations thereto. Applicant therefore also requests reconsideration and withdrawal of the § 102 rejections of claims 2-7 for the same reasons.

Amended Independent Claim 8 Patently Distinguishes Over Rahnema

Amended independent claim 8 recites a control station that generates a batch of forwarding tables. The batch of forwarding tables includes a primary forwarding table and backup forwarding tables for each of a plurality of nodes in a network. The control station receives a message from at least one of the nodes. The message instructs one or more nodes in the network to switch to one of the plurality of backup forwarding tables at the respective node that is associated with a link identified in the message.

As set forth above, Rahnema fails to describe generating a batch of forwarding tables that includes a primary forwarding table and a plurality of backup forwarding tables. Thus, Rahnema does not teach each and every limitation of amended independent claim 8, as is required for a rejection under § 102(b).

In addition, claim 8 specifically recites that the control station receives a message from at least one of the nodes instructing one or more nodes in the network to switch to one of the plurality of backup forwarding tables associated with a link identified in the message. As also set forth above, Rahnema fails to specifically describe that a node in the network notifies the control station of link failures. Thus, for this additional reason, Applicant requests reconsideration and withdrawal of the § 102 rejection of amended independent claim 8. Claims 9-13 depend from claim 8 and add

further limitations thereto. Applicant therefore also requests reconsideration and withdrawal of the § 102 rejections of claims 9-13 for the same reasons.

Original Independent Claim 14 Patently Distinguishes over Rahnema

Original independent claim 14 recites a network node including memory that stores a first primary forwarding table and a first plurality of backup forwarding tables. The node also includes a processor that replaces the first primary forwarding and the first backup forwarding tables with a second primary forwarding table and a second plurality of backup forwarding tables, respectively.

The Action completely fails to address this subject matter or to identify any particular section of Rahnema that describes this subject matter. Moreover, Applicant has carefully reviewed Rahnema and finds, on the basis of this review, that Rahnema does not describe this subject matter. Thus, Applicant requests reconsideration and withdrawal of the § 102 rejection of original independent claim 14. If the Examiner intends to maintain this rejection, Applicant requests that the Examiner point, with specificity, to where this subject matter is described in Rahnema. Claims 15-22 depend from claim 14 and add further limitations thereto. Applicant therefore also requests reconsideration and withdrawal of the § 102 rejections of claims 15-22 for the same reasons.

Amended Independent Claim 23 Patently Distinguishes over Rahnema

Amended independent claim 23 is directed to a node that stores a primary forwarding table and a plurality of backup forwarding tables. The node detects a quality change in an inbound or outbound link. In response to detecting the quality change, the node generates a message that identifies the detected link, instructing other nodes in the network to switch from a current forwarding table to one of the backup forwarding tables at the respective node.

As set forth above in relation to claim 1, Rahnema fails to describe this subject matter. Thus, Rahnema does not teach each and every limitation of amended independent claim 23, as is required for a rejection under § 102(b). Claims 24-29 depend from claim 23 and add further limitations thereto. Applicant therefore also requests reconsideration and withdrawal of the § 102 rejections of claims 24-29 for the same reasons.

Amended Independent Claims 30 and 35 Patently Distinguish over Rahnema

Amended independent claim 30 recites similar subject matter as claim 8. Specifically, claim 30 recites a method for routing data in a communications network that includes a plurality of nodes. A unique set of forwarding tables, including a primary forwarding table and a plurality of backup forwarding tables is generated for each node. A message is received from a node instructing one or more nodes in the network to switch to one of the plurality of backup forwarding tables associated with a link identified in the message. Amended independent claim 35 recites a computer-readable medium containing instructions for performing a method similar to that described in claim 30. As set forth above, Rahnema fails to describe this subject matter.

Applicant therefore requests reconsideration and withdrawal of the § 102 rejection of amended independent claim 30. Claims 31-34 depend from claim 30 and add further limitations thereto. Applicant therefore also requests reconsideration and withdrawal of the § 102 rejections of claims 31-34 for the same reasons. Independent claim 35, which is not subject to a prior art rejection, is also allowable over Rahnema for the same reasons.

Amended Independent Claims 36 and 40 Patently Distinguish over Rahnema

Each of amended independent claims 36 and 40 requires detecting a change in a quality of an inbound or outbound link associated with a node in a network. In response to said detection, a message is generated that identifies the detected link and instructs one or more nodes in the network to switch to a backup forwarding table associated with the detected link. As set forth above in relation to claim 23, Rahnema fails to describe this subject matter.

Applicant therefore requests reconsideration and withdrawal of the § 102 rejection of amended independent claim 36. Claims 37-39 depend from claim 36 and add further limitations thereto. Applicant therefore also requests reconsideration and withdrawal of the § 102 rejections of claims 37-39 for the same reasons. Independent claim 40, which is not subject to a prior art rejection, is also allowable over Rahnema for the same reasons.

Original Claims 41, 45, and 47 Patently Distinguish over Rahnema

Each of original independent claims 41, 45, and 47 requires detecting a change in a quality of an inbound or outbound link associated with a node in a network. In response to said detection, a message is generated that identifies the detected link and instructs one or more nodes in the network to switch to a backup forwarding table associated with the detected link. As set forth above, Rahnema fails to describe this subject matter.

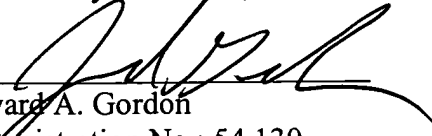
Applicant therefore requests reconsideration and withdrawal of the § 102 rejection of amended independent claims 41 and 47. Claims 42-44 depend from claim 41 and add further limitations thereto. Applicant therefore also requests reconsideration and withdrawal of the § 102 rejections of claims 42-44 for the same reasons. Independent claim 45, which is not subject to a prior art rejection, is also allowable over Rahnema for the same reasons.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response, other than what is reflected on the enclosed Amendment Transmittal. However, if an additional fee is due, please charge our Deposit Account No. 18-1945, under Order No. BBNT-P01-249, from which the undersigned is authorized to draw.

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Respectfully submitted,

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